

Release notes for ENDF/B Development n-012_Mg_024
evaluation

ENDF
B-VII.dev

April 26, 2017

- checkr Warnings:

1. A previous error halted parsing of the current section
MAT=1225, MF= 1, MT=451 (1): Parsing stopped

```
ERROR(S) FOUND IN MAT=1225, MF= 1, MT=451
SECTION CANNOT BE CHECKED FROM SEQUENCE NUMBER      189 TO      280
```

- checkr Errors:

1. A variable is outside the allowed ENDF range
MAT=1225, MF= 1, MT=451 (0): Variable range

```
ERROR(S) FOUND IN MAT=1225, MF= 1, MT=451
MOD =      3 OUT OF RANGE      0 -      0      RECORD NUMBER      189
```

2. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=1225, MF= 2, MT=151 (0): Directory (b)

```
ERROR(S) FOUND IN MAT=1225, MF= 2, MT=151
SECTION 2/151 NOT IN DIRECTORY      RECORD NUMBER      282
```

3. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=1225, MF= 3, MT= 1 (0): Directory (b)

```
ERROR(S) FOUND IN MAT=1225, MF= 3, MT= 1
SECTION 3/ 1 NOT IN DIRECTORY      RECORD NUMBER      319
```

4. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=1225, MF= 3, MT= 2 (0): Directory (b)

```
ERROR(S) FOUND IN MAT=1225, MF= 3, MT= 2
SECTION 3/ 2 NOT IN DIRECTORY      RECORD NUMBER      1257
```

5. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=1225, MF= 3, MT= 4 (0): Directory (b)

```
ERROR(S) FOUND IN MAT=1225, MF= 3, MT= 4
SECTION 3/ 4 NOT IN DIRECTORY      RECORD NUMBER      2195
```

6. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=1225, MF= 3, MT= 16 (0): Directory (b)

```
ERROR(S) FOUND IN MAT=1225, MF= 3, MT= 16
SECTION 3/ 16 NOT IN DIRECTORY      RECORD NUMBER      2214
```

7. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=1225, MF= 3, MT= 22 (0): Directory (b)

- | | | |
|---|---------------|------|
| ERROR(S) FOUND IN MAT=1225, MF= 3, MT= 22 | RECORD NUMBER | 2221 |
| SECTION 3/ 22 NOT IN DIRECTORY | | |
8. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=1225, MF= 3, MT= 28 (0): Directory (b)
- | | | |
|---|---------------|------|
| ERROR(S) FOUND IN MAT=1225, MF= 3, MT= 28 | RECORD NUMBER | 2229 |
| SECTION 3/ 28 NOT IN DIRECTORY | | |
9. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=1225, MF= 3, MT= 51 (0): Directory (b)
- | | | |
|---|---------------|------|
| ERROR(S) FOUND IN MAT=1225, MF= 3, MT= 51 | RECORD NUMBER | 2236 |
| SECTION 3/ 51 NOT IN DIRECTORY | | |
10. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=1225, MF= 3, MT= 52 (0): Directory (b)
- | | | |
|---|---------------|------|
| ERROR(S) FOUND IN MAT=1225, MF= 3, MT= 52 | RECORD NUMBER | 2254 |
| SECTION 3/ 52 NOT IN DIRECTORY | | |
11. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=1225, MF= 3, MT= 53 (0): Directory (b)
- | | | |
|---|---------------|------|
| ERROR(S) FOUND IN MAT=1225, MF= 3, MT= 53 | RECORD NUMBER | 2269 |
| SECTION 3/ 53 NOT IN DIRECTORY | | |
12. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=1225, MF= 3, MT= 54 (0): Directory (b)
- | | | |
|---|---------------|------|
| ERROR(S) FOUND IN MAT=1225, MF= 3, MT= 54 | RECORD NUMBER | 2283 |
| SECTION 3/ 54 NOT IN DIRECTORY | | |
13. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=1225, MF= 3, MT= 55 (0): Directory (b)
- | | | |
|---|---------------|------|
| ERROR(S) FOUND IN MAT=1225, MF= 3, MT= 55 | RECORD NUMBER | 2296 |
| SECTION 3/ 55 NOT IN DIRECTORY | | |
14. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=1225, MF= 3, MT= 56 (0): Directory (b)
- | | | |
|---|---------------|------|
| ERROR(S) FOUND IN MAT=1225, MF= 3, MT= 56 | RECORD NUMBER | 2308 |
| SECTION 3/ 56 NOT IN DIRECTORY | | |
15. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=1225, MF= 3, MT= 57 (0): Directory (b)

- | | |
|---|--------------------|
| ERROR(S) FOUND IN MAT=1225, MF= 3, MT= 57 | |
| SECTION 3/ 57 NOT IN DIRECTORY | RECORD NUMBER 2320 |
16. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=1225, MF= 3, MT= 58 (0): Directory (b)
- | | |
|---|--------------------|
| ERROR(S) FOUND IN MAT=1225, MF= 3, MT= 58 | |
| SECTION 3/ 58 NOT IN DIRECTORY | RECORD NUMBER 2331 |
17. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=1225, MF= 3, MT= 59 (0): Directory (b)
- | | |
|---|--------------------|
| ERROR(S) FOUND IN MAT=1225, MF= 3, MT= 59 | |
| SECTION 3/ 59 NOT IN DIRECTORY | RECORD NUMBER 2341 |
18. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=1225, MF= 3, MT= 60 (0): Directory (b)
- | | |
|---|--------------------|
| ERROR(S) FOUND IN MAT=1225, MF= 3, MT= 60 | |
| SECTION 3/ 60 NOT IN DIRECTORY | RECORD NUMBER 2351 |
19. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=1225, MF= 3, MT= 61 (0): Directory (b)
- | | |
|---|--------------------|
| ERROR(S) FOUND IN MAT=1225, MF= 3, MT= 61 | |
| SECTION 3/ 61 NOT IN DIRECTORY | RECORD NUMBER 2360 |
20. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=1225, MF= 3, MT= 91 (0): Directory (b)
- | | |
|---|--------------------|
| ERROR(S) FOUND IN MAT=1225, MF= 3, MT= 91 | |
| SECTION 3/ 91 NOT IN DIRECTORY | RECORD NUMBER 2369 |
21. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=1225, MF= 3, MT=102 (0): Directory (b)
- | | |
|---|--------------------|
| ERROR(S) FOUND IN MAT=1225, MF= 3, MT=102 | |
| SECTION 3/102 NOT IN DIRECTORY | RECORD NUMBER 2377 |
22. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=1225, MF= 3, MT=103 (0): Directory (b)
- | | |
|---|--------------------|
| ERROR(S) FOUND IN MAT=1225, MF= 3, MT=103 | |
| SECTION 3/103 NOT IN DIRECTORY | RECORD NUMBER 2397 |
23. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=1225, MF= 3, MT=107 (0): Directory (b)

- | | | | |
|--|---|---------------|------|
| | ERROR(S) FOUND IN MAT=1225, MF= 3, MT=107 | | |
| | SECTION 3/107 NOT IN DIRECTORY | RECORD NUMBER | 2415 |
24. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=1225, MF= 4, MT= 2 (0): Directory (b)
- | | | | |
|--|--|---------------|------|
| | ERROR(S) FOUND IN MAT=1225, MF= 4, MT= 2 | | |
| | SECTION 4/ 2 NOT IN DIRECTORY | RECORD NUMBER | 2426 |
25. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=1225, MF= 4, MT= 16 (0): Directory (b)
- | | | | |
|--|---|---------------|------|
| | ERROR(S) FOUND IN MAT=1225, MF= 4, MT= 16 | | |
| | SECTION 4/ 16 NOT IN DIRECTORY | RECORD NUMBER | 2605 |
26. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=1225, MF= 4, MT= 22 (0): Directory (b)
- | | | | |
|--|---|---------------|------|
| | ERROR(S) FOUND IN MAT=1225, MF= 4, MT= 22 | | |
| | SECTION 4/ 22 NOT IN DIRECTORY | RECORD NUMBER | 2616 |
27. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=1225, MF= 4, MT= 28 (0): Directory (b)
- | | | | |
|--|---|---------------|------|
| | ERROR(S) FOUND IN MAT=1225, MF= 4, MT= 28 | | |
| | SECTION 4/ 28 NOT IN DIRECTORY | RECORD NUMBER | 2627 |
28. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=1225, MF= 4, MT= 51 (0): Directory (b)
- | | | | |
|--|---|---------------|------|
| | ERROR(S) FOUND IN MAT=1225, MF= 4, MT= 51 | | |
| | SECTION 4/ 51 NOT IN DIRECTORY | RECORD NUMBER | 2638 |
29. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=1225, MF= 4, MT= 52 (0): Directory (b)
- | | | | |
|--|---|---------------|------|
| | ERROR(S) FOUND IN MAT=1225, MF= 4, MT= 52 | | |
| | SECTION 4/ 52 NOT IN DIRECTORY | RECORD NUMBER | 2729 |
30. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=1225, MF= 4, MT= 53 (0): Directory (b)
- | | | | |
|--|---|---------------|------|
| | ERROR(S) FOUND IN MAT=1225, MF= 4, MT= 53 | | |
| | SECTION 4/ 53 NOT IN DIRECTORY | RECORD NUMBER | 2804 |
31. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=1225, MF= 4, MT= 54 (0): Directory (b)

- | | |
|---|--------------------|
| ERROR(S) FOUND IN MAT=1225, MF= 4, MT= 54 | |
| SECTION 4/ 54 NOT IN DIRECTORY | RECORD NUMBER 2824 |
32. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=1225, MF= 4, MT= 55 (0): Directory (b)
- | | |
|---|--------------------|
| ERROR(S) FOUND IN MAT=1225, MF= 4, MT= 55 | |
| SECTION 4/ 55 NOT IN DIRECTORY | RECORD NUMBER 2842 |
33. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=1225, MF= 4, MT= 56 (0): Directory (b)
- | | |
|---|--------------------|
| ERROR(S) FOUND IN MAT=1225, MF= 4, MT= 56 | |
| SECTION 4/ 56 NOT IN DIRECTORY | RECORD NUMBER 2860 |
34. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=1225, MF= 4, MT= 57 (0): Directory (b)
- | | |
|---|--------------------|
| ERROR(S) FOUND IN MAT=1225, MF= 4, MT= 57 | |
| SECTION 4/ 57 NOT IN DIRECTORY | RECORD NUMBER 2878 |
35. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=1225, MF= 4, MT= 58 (0): Directory (b)
- | | |
|---|--------------------|
| ERROR(S) FOUND IN MAT=1225, MF= 4, MT= 58 | |
| SECTION 4/ 58 NOT IN DIRECTORY | RECORD NUMBER 2896 |
36. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=1225, MF= 4, MT= 59 (0): Directory (b)
- | | |
|---|--------------------|
| ERROR(S) FOUND IN MAT=1225, MF= 4, MT= 59 | |
| SECTION 4/ 59 NOT IN DIRECTORY | RECORD NUMBER 2914 |
37. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=1225, MF= 4, MT= 60 (0): Directory (b)
- | | |
|---|--------------------|
| ERROR(S) FOUND IN MAT=1225, MF= 4, MT= 60 | |
| SECTION 4/ 60 NOT IN DIRECTORY | RECORD NUMBER 2932 |
38. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=1225, MF= 4, MT= 61 (0): Directory (b)
- | | |
|---|--------------------|
| ERROR(S) FOUND IN MAT=1225, MF= 4, MT= 61 | |
| SECTION 4/ 61 NOT IN DIRECTORY | RECORD NUMBER 2949 |
39. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=1225, MF= 4, MT= 91 (0): Directory (b)

- ERROR(S) FOUND IN MAT=1225, MF= 4, MT= 91
SECTION 4/ 91 NOT IN DIRECTORY RECORD NUMBER 2966
40. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=1225, MF= 5, MT= 16 (0): Directory (b)
- ERROR(S) FOUND IN MAT=1225, MF= 5, MT= 16
SECTION 5/ 16 NOT IN DIRECTORY RECORD NUMBER 2990
41. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=1225, MF= 5, MT= 22 (0): Directory (b)
- ERROR(S) FOUND IN MAT=1225, MF= 5, MT= 22
SECTION 5/ 22 NOT IN DIRECTORY RECORD NUMBER 3054
42. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=1225, MF= 5, MT= 28 (0): Directory (b)
- ERROR(S) FOUND IN MAT=1225, MF= 5, MT= 28
SECTION 5/ 28 NOT IN DIRECTORY RECORD NUMBER 3222
43. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=1225, MF= 5, MT= 91 (0): Directory (b)
- ERROR(S) FOUND IN MAT=1225, MF= 5, MT= 91
SECTION 5/ 91 NOT IN DIRECTORY RECORD NUMBER 3369
44. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=1225, MF=12, MT= 16 (0): Directory (b)
- ERROR(S) FOUND IN MAT=1225, MF=12, MT= 16
SECTION 12/ 16 NOT IN DIRECTORY RECORD NUMBER 3551
45. Missing a gamma spectrum for continuum of gammas
MAT=1225, MF=12, MT= 16 (1): No gamma spectrum
- ERROR(S) FOUND IN MAT=1225, MF=12, MT= 16
CONTINUUM PHOTONS REQUIRE A SECTION IN MF=15
46. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=1225, MF=12, MT= 22 (0): Directory (b)
- ERROR(S) FOUND IN MAT=1225, MF=12, MT= 22
SECTION 12/ 22 NOT IN DIRECTORY RECORD NUMBER 3557
47. Missing a gamma spectrum for continuum of gammas
MAT=1225, MF=12, MT= 22 (1): No gamma spectrum
- ERROR(S) FOUND IN MAT=1225, MF=12, MT= 22
CONTINUUM PHOTONS REQUIRE A SECTION IN MF=15

48. Missing a section in directory so your directory is messed up. This error will break everything else

MAT=1225, MF=12, MT= 28 (0): Directory (b)

ERROR(S) FOUND IN MAT=1225, MF=12, MT= 28
SECTION 12/ 28 NOT IN DIRECTORY RECORD NUMBER 3565

49. Missing a gamma spectrum for continuum of gammas
MAT=1225, MF=12, MT= 28 (1): No gamma spectrum

ERROR(S) FOUND IN MAT=1225, MF=12, MT= 28
CONTINUUM PHOTONS REQUIRE A SECTION IN MF=15

50. Missing a section in directory so your directory is messed up. This error will break everything else

MAT=1225, MF=12, MT= 51 (0): Directory (b)

ERROR(S) FOUND IN MAT=1225, MF=12, MT= 51
SECTION 12/ 51 NOT IN DIRECTORY RECORD NUMBER 3573

51. Missing a section in directory so your directory is messed up. This error will break everything else

MAT=1225, MF=12, MT= 52 (0): Directory (b)

ERROR(S) FOUND IN MAT=1225, MF=12, MT= 52
SECTION 12/ 52 NOT IN DIRECTORY RECORD NUMBER 3577

52. Missing a section in directory so your directory is messed up. This error will break everything else

MAT=1225, MF=12, MT= 53 (0): Directory (b)

ERROR(S) FOUND IN MAT=1225, MF=12, MT= 53
SECTION 12/ 53 NOT IN DIRECTORY RECORD NUMBER 3581

53. Missing a section in directory so your directory is messed up. This error will break everything else

MAT=1225, MF=12, MT= 54 (0): Directory (b)

ERROR(S) FOUND IN MAT=1225, MF=12, MT= 54
SECTION 12/ 54 NOT IN DIRECTORY RECORD NUMBER 3585

54. Missing a section in directory so your directory is messed up. This error will break everything else

MAT=1225, MF=12, MT= 55 (0): Directory (b)

ERROR(S) FOUND IN MAT=1225, MF=12, MT= 55
SECTION 12/ 55 NOT IN DIRECTORY RECORD NUMBER 3589

55. Missing a section in directory so your directory is messed up. This error will break everything else

MAT=1225, MF=12, MT= 56 (0): Directory (b)

ERROR(S) FOUND IN MAT=1225, MF=12, MT= 56
SECTION 12/ 56 NOT IN DIRECTORY RECORD NUMBER 3593

56. Missing a section in directory so your directory is messed up. This error will break everything else

MAT=1225, MF=12, MT= 57 (0): Directory (b)

```
ERROR(S) FOUND IN MAT=1225, MF=12, MT= 57
SECTION 12/ 57 NOT IN DIRECTORY          RECORD NUMBER    3597
```

57. Missing a section in directory so your directory is messed up. This error will break everything else

MAT=1225, MF=12, MT= 58 (0): Directory (b)

```
ERROR(S) FOUND IN MAT=1225, MF=12, MT= 58
SECTION 12/ 58 NOT IN DIRECTORY          RECORD NUMBER    3601
```

58. Missing a section in directory so your directory is messed up. This error will break everything else

MAT=1225, MF=12, MT= 59 (0): Directory (b)

```
ERROR(S) FOUND IN MAT=1225, MF=12, MT= 59
SECTION 12/ 59 NOT IN DIRECTORY          RECORD NUMBER    3606
```

59. Missing a section in directory so your directory is messed up. This error will break everything else

MAT=1225, MF=12, MT= 60 (0): Directory (b)

```
ERROR(S) FOUND IN MAT=1225, MF=12, MT= 60
SECTION 12/ 60 NOT IN DIRECTORY          RECORD NUMBER    3611
```

60. Missing a section in directory so your directory is messed up. This error will break everything else

MAT=1225, MF=12, MT= 61 (0): Directory (b)

```
ERROR(S) FOUND IN MAT=1225, MF=12, MT= 61
SECTION 12/ 61 NOT IN DIRECTORY          RECORD NUMBER    3616
```

61. Missing a section in directory so your directory is messed up. This error will break everything else

MAT=1225, MF=12, MT= 91 (0): Directory (b)

```
ERROR(S) FOUND IN MAT=1225, MF=12, MT= 91
SECTION 12/ 91 NOT IN DIRECTORY          RECORD NUMBER    3621
```

62. Missing a gamma spectrum for continuum of gammas

MAT=1225, MF=12, MT= 91 (1): No gamma spectrum

```
ERROR(S) FOUND IN MAT=1225, MF=12, MT= 91
CONTINUUM PHOTONS REQUIRE A SECTION IN MF=15
```

63. Missing a section in directory so your directory is messed up. This error will break everything else

MAT=1225, MF=12, MT=102 (0): Directory (b)

```
ERROR(S) FOUND IN MAT=1225, MF=12, MT=102
SECTION 12/102 NOT IN DIRECTORY          RECORD NUMBER    3629
```

64. Missing a gamma spectrum for continuum of gammas
MAT=1225, MF=12, MT=102 (1): No gamma spectrum
- ERROR(S) FOUND IN MAT=1225, MF=12, MT=102
CONTINUUM PHOTONS REQUIRE A SECTION IN MF=15
65. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=1225, MF=12, MT=103 (0): Directory (b)
- ERROR(S) FOUND IN MAT=1225, MF=12, MT=103
SECTION 12/103 NOT IN DIRECTORY RECORD NUMBER 3642
66. Missing a gamma spectrum for continuum of gammas
MAT=1225, MF=12, MT=103 (1): No gamma spectrum
- ERROR(S) FOUND IN MAT=1225, MF=12, MT=103
CONTINUUM PHOTONS REQUIRE A SECTION IN MF=15
67. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=1225, MF=12, MT=107 (0): Directory (b)
- ERROR(S) FOUND IN MAT=1225, MF=12, MT=107
SECTION 12/107 NOT IN DIRECTORY RECORD NUMBER 3652
68. Missing a gamma spectrum for continuum of gammas
MAT=1225, MF=12, MT=107 (1): No gamma spectrum
- ERROR(S) FOUND IN MAT=1225, MF=12, MT=107
CONTINUUM PHOTONS REQUIRE A SECTION IN MF=15
69. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=1225, MF=14, MT= 16 (0): Directory (b)
- ERROR(S) FOUND IN MAT=1225, MF=14, MT= 16
SECTION 14/ 16 NOT IN DIRECTORY RECORD NUMBER 3664
70. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=1225, MF=14, MT= 22 (0): Directory (b)
- ERROR(S) FOUND IN MAT=1225, MF=14, MT= 22
SECTION 14/ 22 NOT IN DIRECTORY RECORD NUMBER 3666
71. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=1225, MF=14, MT= 28 (0): Directory (b)
- ERROR(S) FOUND IN MAT=1225, MF=14, MT= 28
SECTION 14/ 28 NOT IN DIRECTORY RECORD NUMBER 3668
72. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=1225, MF=14, MT= 51 (0): Directory (b)

- | | | |
|---|---------------|------|
| ERROR(S) FOUND IN MAT=1225, MF=14, MT= 51 | RECORD NUMBER | 3670 |
| SECTION 14/ 51 NOT IN DIRECTORY | | |
73. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=1225, MF=14, MT= 52 (0): Directory (b)
- | | | |
|---|---------------|------|
| ERROR(S) FOUND IN MAT=1225, MF=14, MT= 52 | RECORD NUMBER | 3672 |
| SECTION 14/ 52 NOT IN DIRECTORY | | |
74. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=1225, MF=14, MT= 53 (0): Directory (b)
- | | | |
|---|---------------|------|
| ERROR(S) FOUND IN MAT=1225, MF=14, MT= 53 | RECORD NUMBER | 3674 |
| SECTION 14/ 53 NOT IN DIRECTORY | | |
75. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=1225, MF=14, MT= 54 (0): Directory (b)
- | | | |
|---|---------------|------|
| ERROR(S) FOUND IN MAT=1225, MF=14, MT= 54 | RECORD NUMBER | 3676 |
| SECTION 14/ 54 NOT IN DIRECTORY | | |
76. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=1225, MF=14, MT= 55 (0): Directory (b)
- | | | |
|---|---------------|------|
| ERROR(S) FOUND IN MAT=1225, MF=14, MT= 55 | RECORD NUMBER | 3678 |
| SECTION 14/ 55 NOT IN DIRECTORY | | |
77. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=1225, MF=14, MT= 56 (0): Directory (b)
- | | | |
|---|---------------|------|
| ERROR(S) FOUND IN MAT=1225, MF=14, MT= 56 | RECORD NUMBER | 3680 |
| SECTION 14/ 56 NOT IN DIRECTORY | | |
78. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=1225, MF=14, MT= 57 (0): Directory (b)
- | | | |
|---|---------------|------|
| ERROR(S) FOUND IN MAT=1225, MF=14, MT= 57 | RECORD NUMBER | 3682 |
| SECTION 14/ 57 NOT IN DIRECTORY | | |
79. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=1225, MF=14, MT= 58 (0): Directory (b)
- | | | |
|---|---------------|------|
| ERROR(S) FOUND IN MAT=1225, MF=14, MT= 58 | RECORD NUMBER | 3684 |
| SECTION 14/ 58 NOT IN DIRECTORY | | |
80. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=1225, MF=14, MT= 59 (0): Directory (b)

- | | | |
|--|---|--------------------|
| | ERROR(S) FOUND IN MAT=1225, MF=14, MT= 59 | |
| | SECTION 14/ 59 NOT IN DIRECTORY | RECORD NUMBER 3686 |
81. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=1225, MF=14, MT= 60 (0): Directory (b)
- | | | |
|--|---|--------------------|
| | ERROR(S) FOUND IN MAT=1225, MF=14, MT= 60 | |
| | SECTION 14/ 60 NOT IN DIRECTORY | RECORD NUMBER 3688 |
82. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=1225, MF=14, MT= 61 (0): Directory (b)
- | | | |
|--|---|--------------------|
| | ERROR(S) FOUND IN MAT=1225, MF=14, MT= 61 | |
| | SECTION 14/ 61 NOT IN DIRECTORY | RECORD NUMBER 3690 |
83. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=1225, MF=14, MT= 91 (0): Directory (b)
- | | | |
|--|---|--------------------|
| | ERROR(S) FOUND IN MAT=1225, MF=14, MT= 91 | |
| | SECTION 14/ 91 NOT IN DIRECTORY | RECORD NUMBER 3692 |
84. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=1225, MF=14, MT=102 (0): Directory (b)
- | | | |
|--|---|--------------------|
| | ERROR(S) FOUND IN MAT=1225, MF=14, MT=102 | |
| | SECTION 14/102 NOT IN DIRECTORY | RECORD NUMBER 3694 |
85. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=1225, MF=14, MT=103 (0): Directory (b)
- | | | |
|--|---|--------------------|
| | ERROR(S) FOUND IN MAT=1225, MF=14, MT=103 | |
| | SECTION 14/103 NOT IN DIRECTORY | RECORD NUMBER 3696 |
86. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=1225, MF=14, MT=107 (0): Directory (b)
- | | | |
|--|---|--------------------|
| | ERROR(S) FOUND IN MAT=1225, MF=14, MT=107 | |
| | SECTION 14/107 NOT IN DIRECTORY | RECORD NUMBER 3698 |
87. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=1225, MF=15, MT= 16 (0): Directory (b)
- | | | |
|--|---|--------------------|
| | ERROR(S) FOUND IN MAT=1225, MF=15, MT= 16 | |
| | SECTION 15/ 16 NOT IN DIRECTORY | RECORD NUMBER 3701 |
88. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=1225, MF=15, MT= 22 (0): Directory (b)

- | | | |
|--|---|--------------------|
| | ERROR(S) FOUND IN MAT=1225, MF=15, MT= 22 | |
| | SECTION 15/ 22 NOT IN DIRECTORY | RECORD NUMBER 3723 |
89. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=1225, MF=15, MT= 28 (0): Directory (b)
- | | | |
|--|---|--------------------|
| | ERROR(S) FOUND IN MAT=1225, MF=15, MT= 28 | |
| | SECTION 15/ 28 NOT IN DIRECTORY | RECORD NUMBER 3807 |
90. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=1225, MF=15, MT= 91 (0): Directory (b)
- | | | |
|--|---|--------------------|
| | ERROR(S) FOUND IN MAT=1225, MF=15, MT= 91 | |
| | SECTION 15/ 91 NOT IN DIRECTORY | RECORD NUMBER 3878 |
91. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=1225, MF=15, MT=102 (0): Directory (b)
- | | | |
|--|---|--------------------|
| | ERROR(S) FOUND IN MAT=1225, MF=15, MT=102 | |
| | SECTION 15/102 NOT IN DIRECTORY | RECORD NUMBER 4123 |
92. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=1225, MF=15, MT=103 (0): Directory (b)
- | | | |
|--|---|--------------------|
| | ERROR(S) FOUND IN MAT=1225, MF=15, MT=103 | |
| | SECTION 15/103 NOT IN DIRECTORY | RECORD NUMBER 4584 |
93. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=1225, MF=15, MT=107 (0): Directory (b)
- | | | |
|--|---|--------------------|
| | ERROR(S) FOUND IN MAT=1225, MF=15, MT=107 | |
| | SECTION 15/107 NOT IN DIRECTORY | RECORD NUMBER 4785 |
94. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=1225, MF=33, MT= 1 (0): Directory (b)
- | | | |
|--|--|--------------------|
| | ERROR(S) FOUND IN MAT=1225, MF=33, MT= 1 | |
| | SECTION 33/ 1 NOT IN DIRECTORY | RECORD NUMBER 5024 |
95. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=1225, MF=33, MT= 2 (0): Directory (b)
- | | | |
|--|--|--------------------|
| | ERROR(S) FOUND IN MAT=1225, MF=33, MT= 2 | |
| | SECTION 33/ 2 NOT IN DIRECTORY | RECORD NUMBER 5031 |
96. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=1225, MF=33, MT= 4 (0): Directory (b)

ERROR(S) FOUND IN MAT=1225, MF=33, MT= 4
SECTION 33/ 4 NOT IN DIRECTORY RECORD NUMBER 5073

97. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=1225, MF=33, MT= 16 (0): Directory (b)

ERROR(S) FOUND IN MAT=1225, MF=33, MT= 16
SECTION 33/ 16 NOT IN DIRECTORY RECORD NUMBER 5109

98. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=1225, MF=33, MT=102 (0): Directory (b)

ERROR(S) FOUND IN MAT=1225, MF=33, MT=102
SECTION 33/102 NOT IN DIRECTORY RECORD NUMBER 5115

• **psyche** Warnings:

- Gamma width not in agreement with PSYCHE's expectations
FILE 2 / SECTION 151 / ISOTOPE MASS = 24. L = 1 / AT RESONANCE ENERGY 4.98200E+05 EV. THE GAMMA WIDTH 3.80000E-01 DEVIATES TOO MUCH FROM THE AVERAGE 4.42000E+00 (0): Gamma width

FILE 2
SECTION 151
ISOTOPE MASS = 24. L = 1
AT RESONANCE ENERGY 4.98200E+05 EV. THE GAMMA WIDTH 3.80000E-01 DEVIATES TOO MUCH FROM THE AVERAGE 4.42000E+00 (0): Gamma width

- Strength function in URR not in agreement with PSYCHE's expectations
FILE 2 / SECTION 151 / ISOTOPE MASS = 24. L = 1 / STRENGTH FUNCTION IS 1.61042E-03 / STRENGTH FUNCTION 1.61042E-03 / LIES OUTSIDE LIMITS 1.00000E-05 TO 2.00000E-04 (0): URR str. ftn.

FILE 2
SECTION 151
ISOTOPE MASS = 24. L = 1
STRENGTH FUNCTION IS 1.61042E-03
STRENGTH FUNCTION 1.61042E-03
... [1 more lines]

• **linear** Errors:

- Negative cross section found
0: Neg. Sig(E)

Linearize ENDF/B Cross Sections (LINEAR 2015-1)

Retrieval Criteria----- MAT
Monitor Mode----- Off
Minimum Cross Section----- 1.0000E-10 (Default Option)
... [62 more lines]

• **fudge-4.0** Warnings:

1. Missing a channel with a particular angular momenta combination
resonances / resolved / MultiLevelBreitWigner (Error # 0): missingResonanceChannel

```
WARNING: Missing a channel with angular momenta combination L = 0, J = 1.5 and S = 1.5 for "capture"
WARNING: Missing a channel with angular momenta combination L = 1, J = 0.5 and S = 1.5 for "capture"
WARNING: Missing a channel with angular momenta combination L = 1, J = 1.5 and S = 1.5 for "capture"
WARNING: Missing a channel with angular momenta combination L = 1, J = 2.5 and S = 1.5 for "capture"
... plus 4 more instances of this message
```

2. Cross section does not match sum of linked reaction cross sections
crossSectionSum label 1: (z,n) (Error # 0): CS Sum.

```
WARNING: Cross section does not match sum of linked reaction cross sections! Max diff: 0.20%
```

3. The ratio of smallest/largest eigenvalue is quite small, possibly leading to numerical instability in downstream codes.
Section 1 (n + Mg24): / Form 'eval': / Component 1 (Error # 0): Condition num.

```
WARNING: Ratio of smallest/largest eigenvalue (0.000000e+00) is too small
```

4. The ratio of smallest/largest eigenvalue is quite small, possibly leading to numerical instability in downstream codes.
Section 2 ((z,n)): / Form 'eval': (Error # 0): Condition num.

```
WARNING: Ratio of smallest/largest eigenvalue (0.000000e+00) is too small
```

5. The ratio of smallest/largest eigenvalue is quite small, possibly leading to numerical instability in downstream codes.
Section 3 (n[multiplicity:'2'] + Mg23 + gamma): / Form 'eval': (Error # 0): Condition num.

```
WARNING: Ratio of smallest/largest eigenvalue (0.000000e+00) is too small
```

6. The ratio of smallest/largest eigenvalue is quite small, possibly leading to numerical instability in downstream codes.
Section 4 (Mg25 + gamma): / Form 'eval': / Component 1 (Error # 0): Condition num.

```
WARNING: Ratio of smallest/largest eigenvalue (0.000000e+00) is too small
```

• njoy2012 Warnings:

1. Evaluation has no unresolved resonance parameters given
unresr...calculation of unresolved resonance cross sections (0): No URR

```
---message from unresr---mat 1225 has no unresolved parameters
copy as is to nout
```

2. Evaluation has no unresolved resonance parameters given
purr...probabalistic unresolved calculation (0): No URR

```
---message from purr---mat 1225 has no unresolved parameters
copy as is to nout
```

3. With the advent of the ENDF-6 format, it is possible to make evaluations that fully describe all the products of a nuclear reaction. Some carry-over evaluations from earlier ENDF/B versions also have this capability, but many do not. This message is intended to goad evaluators to improve things!
groupr...compute self-shielded group-averaged cross-sections (0): GROUPR/conver (0)

```
---message from conver---cannot do complete particle production for mt= 16
                        only mf4/mf5 provided
```

4. With the advent of the ENDF-6 format, it is possible to make evaluations that fully describe all the products of a nuclear reaction. Some carry-over evaluations from earlier ENDF/B versions also have this capability, but many do not. This message is intended to goad evaluators to improve things!
groupr...compute self-shielded group-averaged cross-sections (1): GROUPR/conver (0)

```
---message from conver---cannot do complete particle production for mt= 22
                        only mf4/mf5 provided
```

5. With the advent of the ENDF-6 format, it is possible to make evaluations that fully describe all the products of a nuclear reaction. Some carry-over evaluations from earlier ENDF/B versions also have this capability, but many do not. This message is intended to goad evaluators to improve things!
groupr...compute self-shielded group-averaged cross-sections (2): GROUPR/conver (0)

```
---message from conver---cannot do complete particle production for mt= 28
                        only mf4/mf5 provided
```

6. With the advent of the ENDF-6 format, it is possible to make evaluations that fully describe all the products of a nuclear reaction. Some carry-over evaluations from earlier ENDF/B versions also have this capability, but many do not. This message is intended to goad evaluators to improve things!
groupr...compute self-shielded group-averaged cross-sections (3): GROUPR/conver (0)

```
---message from conver---cannot do complete particle production for mt= 91
                        only mf4/mf5 provided
```

7. Coefficient mismatch of some sort
covr...process covariance data (1): COVR/matshd (2)

```
---message from matshd---processing of mat/mt 1225/102 vs. mat1/mt1 1225/102
                        largest coefficient= 1.00000E+00 at index 12 94
```

8. The number of coefficients was too large in a covariance
covr...process covariance data (2): Cov:Too many coeff.

```
---message from matshd---**** coefficients > 1
                        reset and continue.
```